

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 06/15/2006

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/774,834	02/09/2004	Yoshiharu Hirakata	0553-0276-01	9766	
7:	590 06/15/2006		EXAM	INER	
COOK, ALEX, McFARRON, MANZO,			DUDEK, J	DUDEK, JAMES A	
CUMMINGS &	& MEHLER, LTD.				
SUITE 2850			ART UNIT	PAPER NUMBER	
200 WEST ADAMS STREET			2871		
CHICAGO, IL	. 60606				

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/774,834	HIRAKATA ET AL.				
		Examiner	Art Unit				
		James A. Dudek	2871				
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the o	correspondence address				
WHIC - Exte after - If NC - Failu Any	IORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAINS ions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Dipeniod for reply is specified above, the maximum statutory period ware to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication (35 U.S.C. § 133).				
Status							
1)⊠	Responsive to communication(s) filed on 31 M	arch 2006.					
2a)⊠	This action is FINAL. 2b) This action is non-final.						
3)[	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposit	ion of Claims			•			
4)⊠	Claim(s) <u>18-56</u> is/are pending in the application						
5)[]	4a) Of the above claim(s) <u>See Continuation She</u> Claim(s) is/are allowed.	eet is/are withtrawn from conside	eradon.	•			
	Claim(s) <u>20,22,26,28,32,34,38,41,43,47,49,53</u>	and 55 is/are rejected					
7)	Claim(s) is/are objected to.	<u> </u>					
8)□	Claim(s) are subject to restriction and/or	r election requirement.					
Applicat	ion Papers						
·· _	The specification is objected to by the Examine	r					
•	The drawing(s) filed on is/are: a) ☐ acce		Examiner.				
-,	Applicant may not request that any objection to the						
	Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(c	i).			
11)	The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority (	under 35 U.S.C. § 119						
•	12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:						
	1. Certified copies of the priority documents	s have been received.	. •				
	2. Certified copies of the priority documents	s have been received in Applicati	on No. <u>09/949,415</u> .				
•	3. Copies of the certified copies of the prior	rity documents have been receive	ed in this National Stage				
;	application from the International Bureau						
* See the attached detailed Office action for a list of the certified copies not received.							
Attachmer	nt(e)						
_	n(s) ce of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) 🔲 Notic	ce of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date	6) Other:	Patent Application (PTO-152)				
			<u> </u>				

Continuation of Disposition of Claims: Claims withdrawn from consideration are 18,19,21,23-25,27,29-31,33,35-37,39,40,42,44-46,48,54 and 56.

Application/Control Number: 10/774,834

Art Unit: 2871

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 20, 26, 32, 38, 41, 47 and 53 are rejected under 35 U.S.C. 102(e) as being anticipated by US006683592B1 (592).

Per claim 20, 592 teaches a reflective or transmissive LCD used in a mobile computer comprising at least one TFT over a substrate; at least one gate wiring over the substrate [3] and electrically connected with a gate electrode [aluminum gate 3a]; at least one source wiring over the substrate [6] and electrically connected with a semiconductor film [3a and 1]; at least one convex portion overlapping with the source wiring [see organic layer 7 and region 302 shown in the figures].

Regarding the recently added second insulation layer, it was notoriously well known to cover TFTs with first an inorganic insulating layer to prevent ion leakage from the TFT to the liquid crystal material and on top of the inorganic insulating layer a second organic leveling film to reduce noise. Accordingly, it would have been obvious to one of ordinary skill at the time of invention to combine the well known insulating layer with 592 for the reasons articulated supra.

Application/Control Number: 10/774,834

Art Unit: 2871

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 22, 28, 34, 43, 49 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over 592.

Per claim 22, 592 lacks the leveling film. However, it was well known to use level films to protect the color filters. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of invention.

Regarding the recently added second insulation layer, it was notoriously well known to cover TFTs with first an inorganic insulating layer to prevent ion leakage from the TFT to the liquid crystal material and on top of the inorganic insulating layer a second organic leveling film to reduce noise. Accordingly, it would have been obvious to one of ordinary skill at the time of invention to combine the well known insulating layer with 592 for the reasons articulated supra.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Application/Control Number: 10/774,834

Art Unit: 2871

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this

Page 4

final action.

Response to Arguments

Applicant's arguments with respect to the rejected claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Dudek whose telephone number is 571-272-2290. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866 217-9197 (toll-free).

James A. Dudek Primary Examiner Art Unit 2871